# VI. An Inquiry into the real Daucus Gingidium of Linncus. By James Edward Smith, M.D. F.R.S. P.L.S. 

Read April 1, 1806.
I have often had occasion to remark that when Linnæus adopted species of plants into his systematic works on the authority of other authors, he has been peculiarly liable to error. There seems to be a fatality attending his medicinal plants, no doubt from the great difficulty of penetrating through the clouds with which ignorance, interest and fraud for the most part envelop such articles of the Materia Medica as are brought from remote countries. Even when all these sources of delusion do not exist, bad figures and imperfect descriptions are but fallacious guides; nor is any thing but the sight of a good specimen sufficient to prevent mistakes, even in the most wary, occupied in so vast a study as botany is now become.

Sometimes Linnæus was induced by a striking figure, name or description, to attempt a characteristic definition of a plant which he had never seen. In that case he generally retained its original denomination as a specific name. Now it frequently happened, from the defects of his authorities, or a failure in his own memory, that when he saw the real plant he did not know it, and perhaps described it over again as new. His various editors could scarcely detect such mistakes, and perhaps would hardly dare to suspect them. Even when he commits an error in copying a synonym, they seem afraid of correcting
what is obviously wrong; or else they have been unpardonably negligent in not turning to the authors quoted, for this at least was in their power, and it is one of the things which is, of all others, most indispensable in an editor. How necessary it is with respect to the editions of Linnæus's works, printed and reprinted by awkward and ignorant hands in various countries, no one who has used them can be uninformed. I had abundant experience of this necessity in republishing even his original Flora Lapponica, and the history of Daucus Gingidium will afford examples of every thing to which I have just alluded.
This plant is mentioned in the 1st edition of the Species Plantarum, p. 242, with the following definition. Daveus radios involucri planis: laciniis recurvis, and a reference to Van Royen's Flore Leydensis Prodromus, is subjoined. There we find the same specific character, as well as the same quotations of Bauhin and Matthiolus, except that Van Royen cites the large Valgrisian edition of the latter writer, and Linnæus the small one, not having the other. No further information is to be found in Van Royen. Linnæus quotes a synonym from Magnol, and another from Boccone's Plante Sicilic, both which appear to me very doubtful. It is not, however, necessary to scrutinize them, as the authority of this species evidently depends on the figures of Matthiolus, from which the character is in a great measure taken. Linnæus had no specimen of it in his herbarium, but as he has not annexed the cross $(\uparrow)$ to express his never having seen it, I presume he might have examined a specimen in the hands of his confidential friend Van Royen.

In the 2d edition of the Species Plantarum, every thing is repeated from the former, with the addition of a synonym from Tournefort, Daucus montanus lucidus, Tourn. Inst. S07, in which there is a remarkable error, for in Tournefort it is maritimus, not
montanus; and yet this erroneous citation is perpetuated in the Vienna edition, in Reichard, and in Willdenow. How could these able editors at the same time overlook the excellent figure of Rivinus, Staphylimus folio latiore, Riv. Pent. Irr. t. S0, which unquestionably belongs to our plant?

I am not acquainted with the Daucus polygamus of Gouan, Illustr. p. 9, to which the above synonyms of Boccone and Magnol are now applied, but I conceive it to be very different from the Gingidium. I do not presume absolutely to decide on this question, but I beg leave to observe that Gouan seems not acquainted with the true Gingidium by name, for he says the figure in Boccone's Museum, t. 20, quoted under his Daucus hispanicus, agrees better with Gingidium. Now that figure is not at all like the true Gingidium, with which latter, however, Gouan's description of his $D$. hispanicus so well agrees, that I am persuaded the plant he has described under this last name is truly the D. Gingidium of Linnæus.

In his declining years Linnæus cultivated in the Upsal garden a Daucus, a specimen of which is preserved in his herbarium without any trivial name. This is described in the Supplementum under the name of lucidus, without any synonym, and said to come from Mauritania. This specimen is evidently the Gingidium of Matthiolus, with whose figures, in both editions, it strikingly accords, and even still better with the Linnean definition of the involucrum, laciniis recurvis. This last excellent character not being well expressed in those figures, convinces me of Linnæus having originally described the Gingidium from nature. It is remarkable that neither he nor his son should have compared this specimen with the definition or synonyms of $D$. Gingidium, with which it so perfectly agrees; but they were perhaps misled by a specimen in their herbarium marked Gingidium, which is really the Daucus (or more properly, as the French botanists make it, Ammi) Visnaga.

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As I never met with an authentic specimen of Daucus Gingidium in any herbarium, I presume the above detail may not be useless. It shows how much attention is necessary to avoid error in botanical synonyms, and how essential it is, in all difficult cases, to trace the history of a plant to its sources. I believe there is scarcely a genus, among the umbelliferous plants in particular, which would not afford matter for several such disquisitions as the present.
J. E. Smith.

Norwich, March 25, 1806.

